DOCUMENT RESUME

ED 050 400 CG 006 404

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TITLE	A Preliminary Look at Employment Interviewers' Proficiency at Combining Information Cues.
INSTITUTION	Wayne State Univ., Detroit, Mich.
PUB DATE	6 May 71
NOTE	13p.; Paper presented at the Midwestern Psychological Association Convention in Detroit, Michigan, May 6-8, 1971
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Competitive Selection, Cues, *Employment Interviews, *Evaluation Methods, Information Processing, *Interviews, *Personnel Selection

ABSTRACT

The most commonly stated and demonstrated shortcoming of the employment interview is its lack of reliability. Yet Wagner (1949) was able to conclude that the reliability of an employment interview is situation and interviewer specific. In this study, the author investigated the interviewer's scoring system, the way he weighs and combines the information he gathers as he attempts to make a personnel decision. This information processing includes: (1) assessing the interrelations of the cues; (2) assessing the validity of the cues for his given purpose; and (3) combining the individual validities while partialling out the common variance among the cues. Results show that: (1) interviewers make adjustments when they perceive redundant information; (2) they process negative information more accurately than positive information; and (3) they differ widely in terms of how valid and interdependent they perceive information units to be. The decisions or hiring recommendations were based almost exclusively on the overall evaluations of the information which the interviewers received and processed. If the final evaluation exceeded the base rate of success, the recommendation was to hire; if not, the recommendation was to reject. (TA)

ED050400

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Presented at

Midwestern Psychological Association

May 6, 1971

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A Preliminary Look at Employment Interviewers' Proficiency at Combining Information Cues

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Salvation for the employment interview is unlikely unless it can be shown that interviewers' judgments are other than random. Ultimately, we would like to see a high degree of agreement among interviewers on valid predictions of job success. But to achieve this desirable state of affairs it is first necessary to gain a better understanding of the basic element involved, the individual employment interviewer.

The most commonly stated and demonstrated shortcoming of the employment interview is its lack of reliability. Interviewers, we are told, seldom agree on their rankings or ratings of applicants (Scott, 1915). And yet there is hope. Intrarater reliability is not so bad (Shaw, 1952; Anderson, 1954) and furthermore, Bass (1951) has shown that interrater reliability among interviewers in the same company is suitably high (r=.56 and .74) when they follow the same patterned interview guide, even though the patterned procedure did not increase the usual low agreement among interviewers in different companies.

This evidence substantiates Wagner's (1949) conclusion that the reliability of the employment interview is situation and interviewer specific. And why shouldn't it be!? We do not necessarily expect high agreement among all similarly named scales across all personality inventories, only test-retest agreement within each specific inventory. If each interviewer has his own way of gathering and interpreting

information based on his own experience and the particular requirements of his specific job situation it would be a good idea to spend some time looking at the operations of individual interviewers before combining data across interviewers to look at the overall effectiveness of the employment interview.

I chose to begin by investigating the interviewer's scoring system --the way he weights and combines the information he gathers as he presses towards a personnel decision.

Given that the employment interviewer attends to the information which he gathers, this information processing required of the Employment Interviewer includes three steps. First, he must assess the validity of the cues for his particular purpose. Second, he must assess the interrelations of the cues, and third, he must combine the individual validities while partialling out the common variance among the cues.

The subjects in this study were 39 Employment Interviewers, all of whom had experience interviewing applicants for management trainee positions, the 'job' the interviewers were to consider.

Data was collected in 3 stages corresponding to the three information processing steps (although in a different order). The first stage was designed to obtain each interviewer's belief as to the independent validity of all information cues to be used in the study. This was done by having each S estimate the base rate of success for management trainees in his organization and then evaluate 45 hypothetical applicants, each one being described by one information unit. The rating was made as a probability of success. The P(S) minus the BR(S), another probability estimate, was the index of validity, the sign indicating

whether the information was perceived as being favorable or unfavorable.

The second stage was the information processing task. Ss were presented with 3 applicants, each represented by 15 of the previously evaluated information units. The units were presented one at a time, in a pre-arranged sequence: following each unit the S made a reevaluation of the applicant's P(S). After the final reevaluation, the S also made a decision to hire or reject the applicant.

The third stage of data collection tapped the Ss' perception of the overlap among the information cues. The three sets of 15 information cues were presented again, in the same order as in the applicants. This time, on encountering each successive information unit, Ss shaded in a portion of a rectangle to represent the proportion of new information that overlapped with the information already obtained.

The data from stages 1 and 3 were used to obtain predicted re-evaluations, the criterion against which performance on the information processing task was evaluated. The initial independent values of the information units, the shifts from the base rate of success, were reduced by a factor corresponding to the percent overlap to obtain predicted shifts. This strategy, obviously, assumes a linear, additive model of combining information. In all computations, percent values were first converted to standard units from the normal distribution to allow comparisons at various points on the percentile scale.

Errors in reevaluations, Actual Shift minus Predicted Shift, were then computed for each of the 15 reevaluations of each applicant by each interviewer. Overshifts, actual shifts greater than the predicted shifts, received a positive sign; undershifts, actual shifts less than the predicted shifts, received a negative sign. Errors were not cumulated in this

procedure; actual shifts for each information unit were calculated from the previous evaluation, regardless of any errors that had occured up to that point. These individual shift error scores were used to obtain, for each interviewer, an average error score for favorable units of information and an average error score for unfavorable units of information.

The interviewers' overall performance can be most easily appreciated by comparing their actual reevaluations with the cumulative predicted reevaluations (Fig. 1). The cumulative predictions represent the course which the interviewers' reevaluations should have followed if they were operating perfectly in relation to the linear, additive model. In most cases it was clear that the form of the actual reevaluations was similar to that of the predicted reevaluations. Moreover, the graphs indicate that while an interviewer may be "thrown off the track" by one unit of information, the chance of the same interviewer correctly processing any one additional unit of information remains high. This can be observed in Figures 2 and 3.

To fully appreciate the general accuracy of the information processing performed by many of the interviewers, two characteristics of this graphic presentation must be kept in mind: (1) the errors do cumulate here, and (2) equal percentile differences are not equivalent throughout the range of the scale. Therefore, it is the similarity in form of the actual and cumulative predicted reevaluations and not, necessarily, their congruency that is indicative of "good" information processing. For these reasons, the bulk of the analyses made use of the error scores described a few moments ago.

Not all Ss performed as well as the first few examples. The majority, 24, did: the rest could be divided into two general categories. Nine interviewers had predicted evaluation curves that went rapidly to an asymptote at 99.99% chance of success while their actual reevaluations were of a form similar to those of the "good" processers (Figure 4). These interviewers were evidently making sizable shifts on the basis of individual information units but were being more conservative when more information was expected. The remaining six Ss showed no relationship between their predicted and actual reevaluations (Figure 5). In some cases the performance is simply not congruent with the model; in a few cases the Ss apparently, in the information processing task, were attempting to replicate their performance on the independent rating task.

An analysis of favorable and unfavorable information error scores indicates that interviewers are more accurate, relative to this model and design, in the processing of negative information than in the processing of positive or favorable information, the errors on positive information being consistantly of a conservative nature, i.e., under-shifts. In all cases the errors on favorable information were significantly less than zero; in no case was the error on unfavorable information significantly different from zero.

These results do not agree with previous findings. Bolster and Springbett (1961), for example, found that, per unit of importance, interviewers gave more weight to negative information. However, they used non-comparable scales to obtain independent ratings of information units and the sequential ratings. Thus, the best they could do was demonstrate a more-or-less relationship. Using comparable scales, this study finds that, per unit of importance, interviewers give less weight

to positive information and process negative information accurately.

The decisions or hiring recommendations were based almost exclusively on the overall evaluations of the information which the interviewers received and processed. If the final evaluation exceeded the base rate of success the recommendation was to Hire: If below the base rate the recommendation was reject.

This does not imply that the decisions were valid! The information processing was accurate only with respect to the linear additive model and the interviewers' own beliefs as to the validity of the information cues. It is possible, for instance, that interviewers overestimate the strength of negative validities for independent information units and thus do, in fact, give it too much weight in the final analysis. But given their beliefs, the information processing by employment interviewers is often very accurate.

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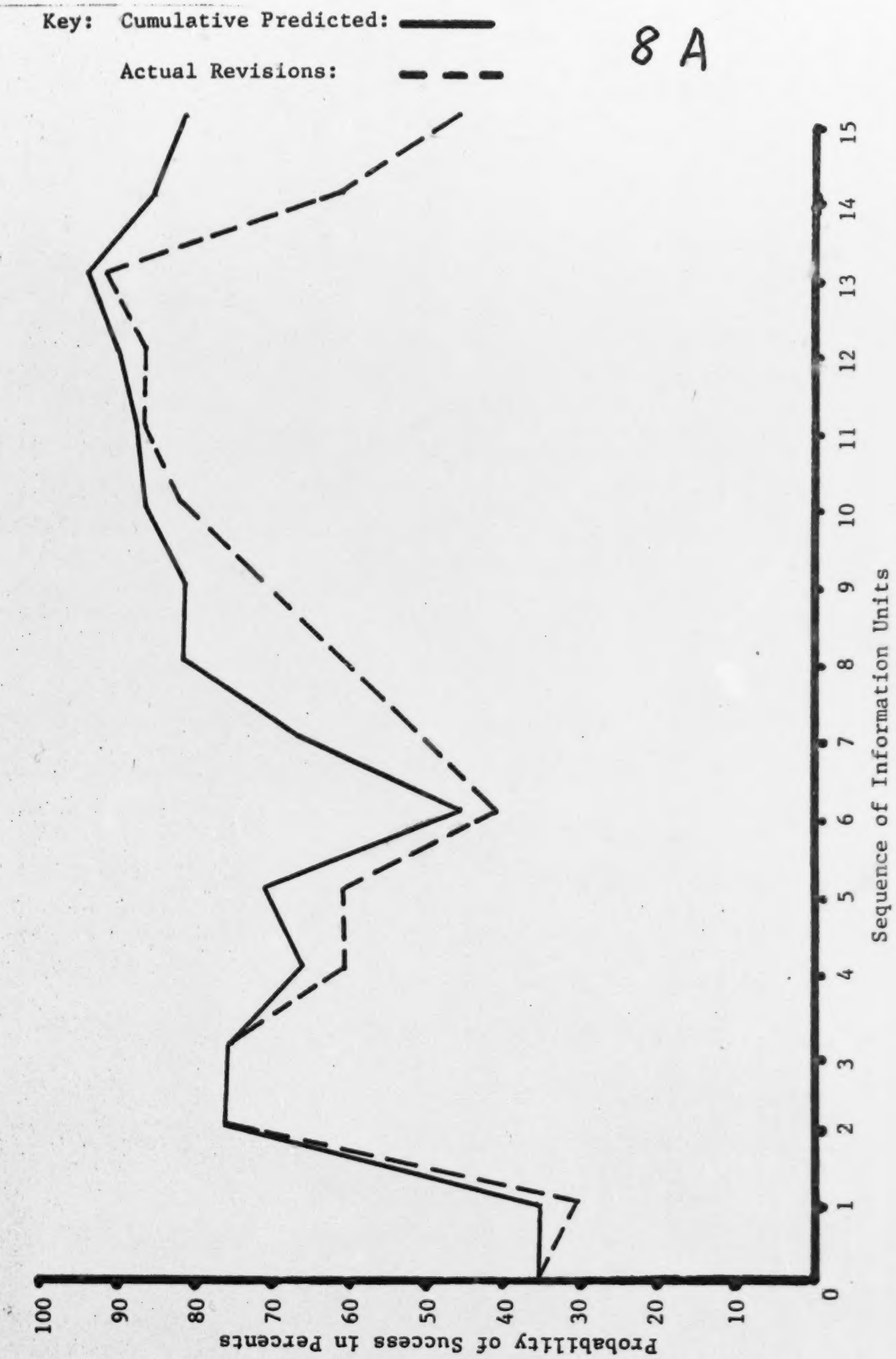
FIGURE 1

8 A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Actual Revisions:
Probability of Success in Percents
100
90
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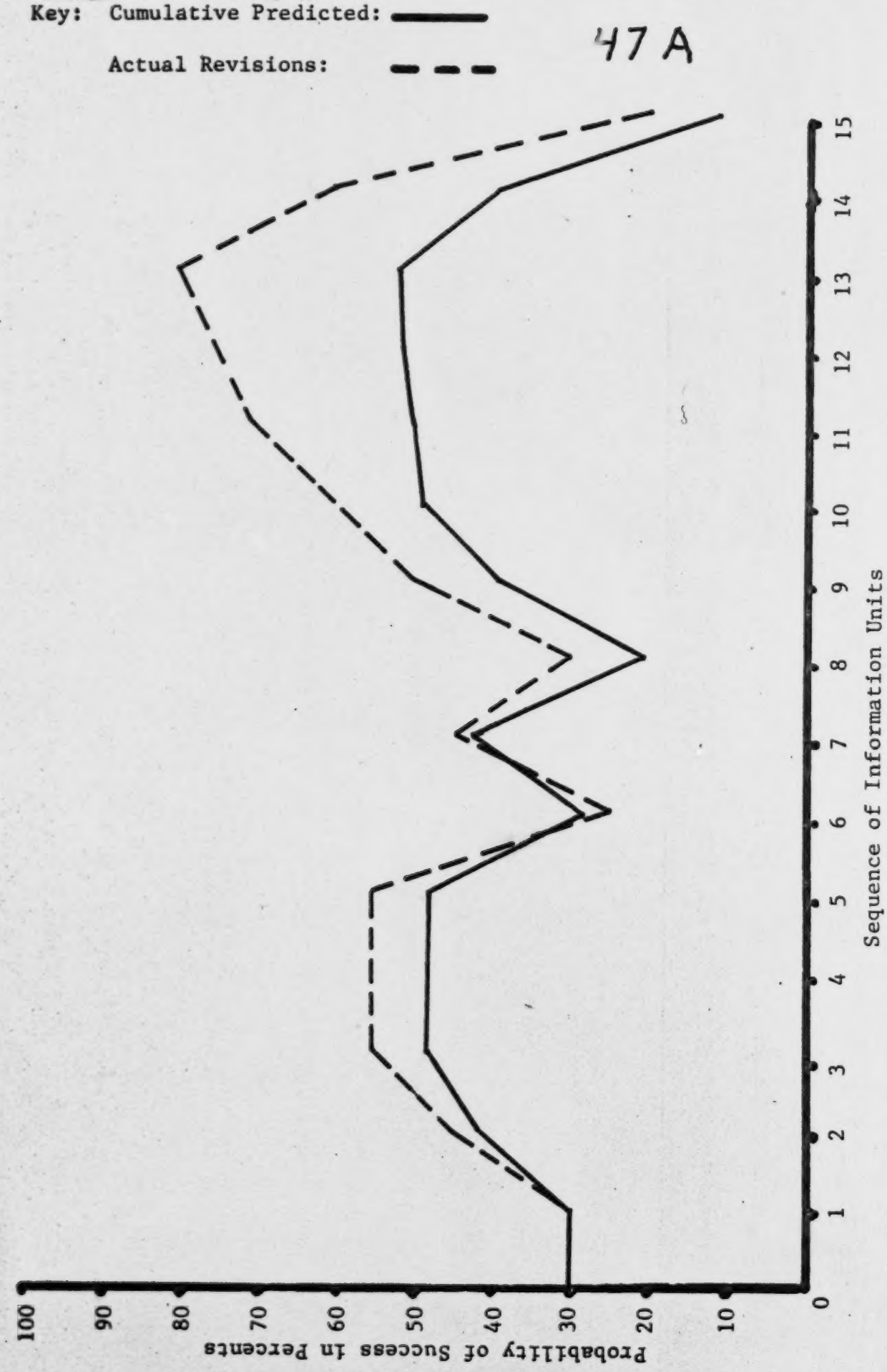
15
Sequence of Information Units

FIGURE 2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Probability of Success in Percents
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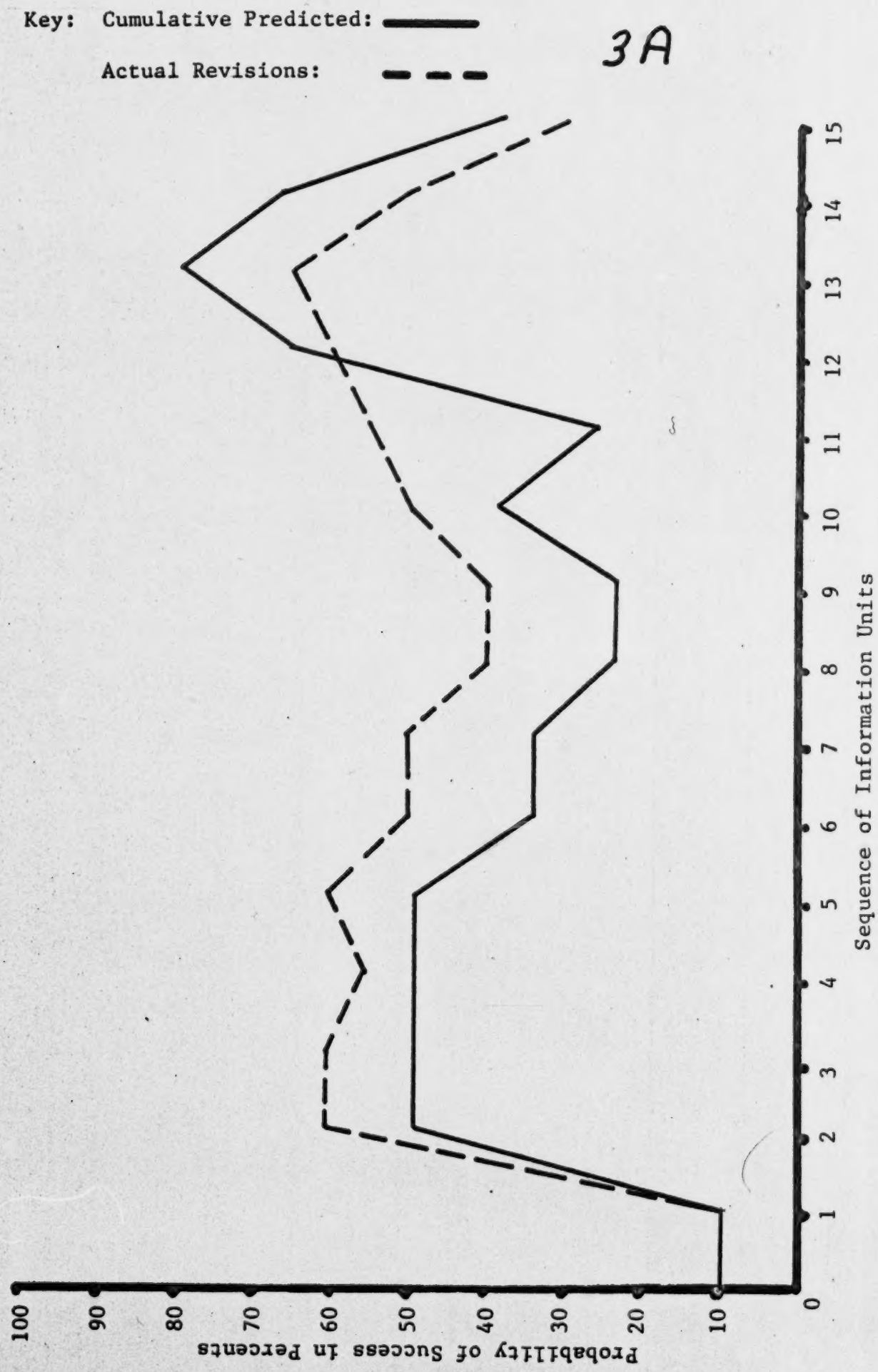
Sequence of Information Units

FIGURE 3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Probability of Success in Percents
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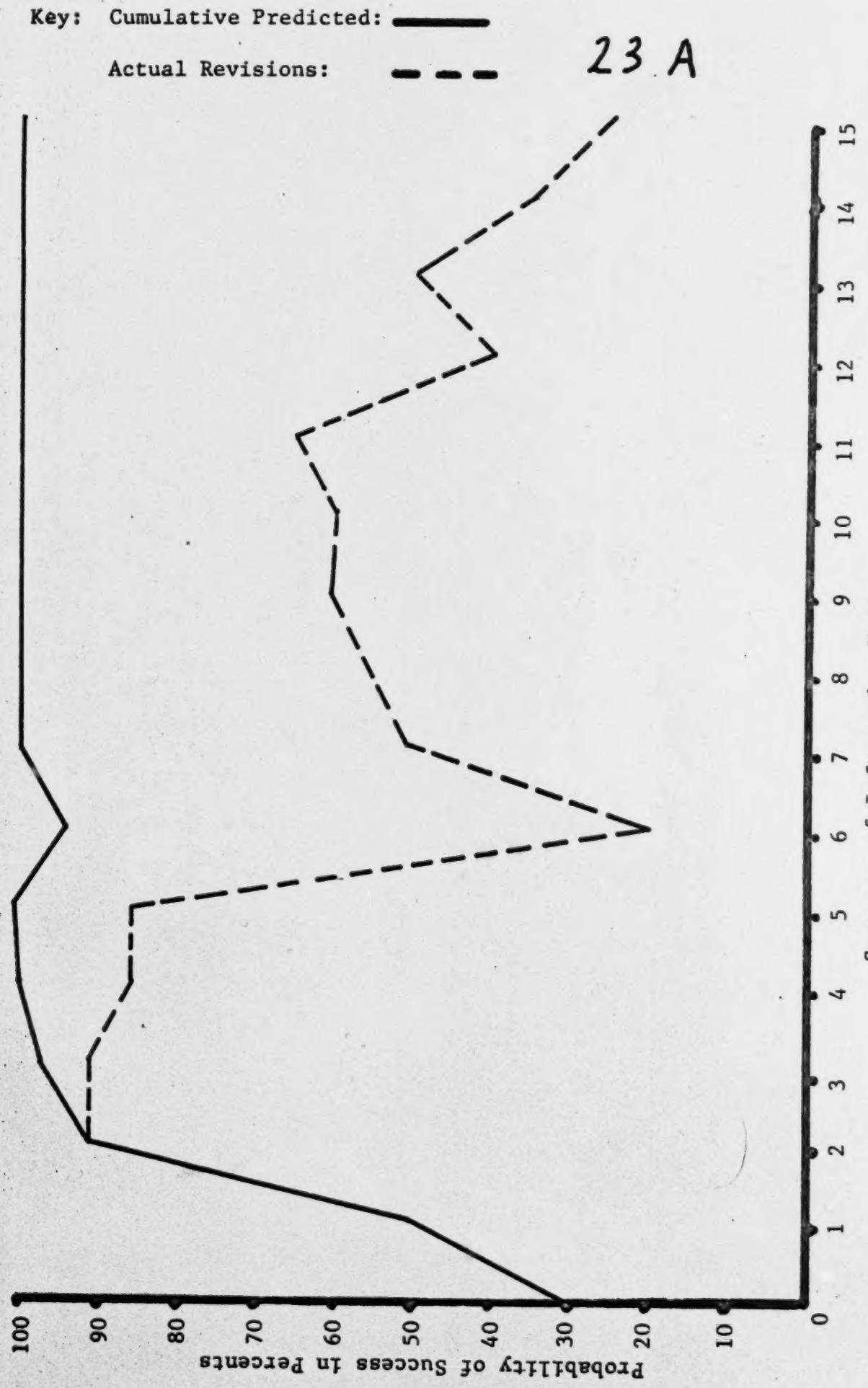
Sequence of Information Units

FIGURE 4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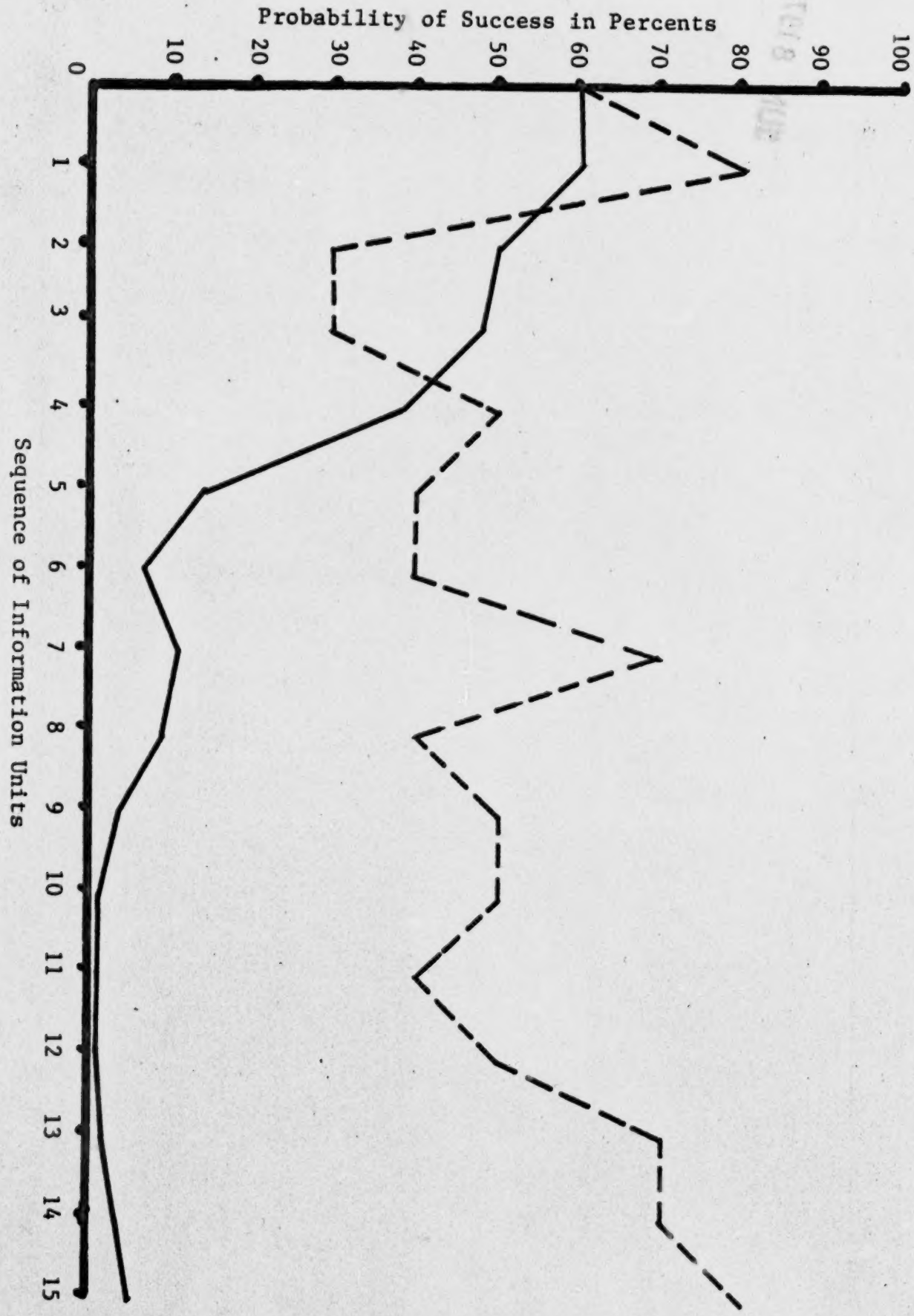
Sequence of Information Units

FIGURE 5


Probability of Success in Percents
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Sequence of Information Units
Key: Cumulative Predicted:
Actual Revisions:

33C